

云南楼梯草属研究随记^{*}

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摘 要 描述了云南荨麻科楼梯草属三新种和一新变种; 列出了勐仑楼梯草与骤尖楼梯草的区别特征, 据此说明勐仑楼梯草是一个比骤尖楼梯草原始的独立种, 不赞同将其归并, 而认为应予以恢复。

关键词 楼梯草属; 荨麻科; 新分类群; 勐仑楼梯草; 恢复; 云南

NOTES ON *ELATOSTEMA* FORST. (URTICACEAE) FROM YUNNAN PROVINCE

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Abstract Three species and one variety of the genus *Elatostema* from Yunnan Province are described as new. According to the differences enumerated in text between *Elatostema menglunense* W. T. Wang et G. D. Tao and *E. cuspidatum* Wight, the reduction of *E. menglunense* into the synonymy of *E. cuspidatum* is not accepted, and the rather distinct and more primitive species, *E. menglunense* is reinstated in the present paper.

Key words *Elatostema*; *Urticaceae*; new taxa; *Elatostema menglunense*; reinstatement; Yunnan Province

三歧楼梯草 图 1: 1, 2

Elatostema trichotomum W. T. Wang, sp. Nov. Fig. 1: 1, 2 (Sect. *Pellionioides* W. T. Wang ser. *Hirtella* W. T. Wang) Ob folia semitriplinervia, inflorescentias staminatas cymosas species nova fortasse affinis *E. hirtello* W. T. Wang, quod plantis fruticosis ramis hirtellis foliis subtus strigulosis stipulis minoribus subulatis 1.5 ~ 2 mm longis, cymarum staminatarum pedunculis puberulis differt.

Herba epiphytica, perennis, dioica. Caules ca. 50 cm alti, prope apicem fractiflexi, glabri, cysto-

lolithis densis conspicuis bacilliformibus 0.1 ~ 0.2 (0.4) mm longis. Folia alternata, brevissima petiolata vel sessilia, glabra; laminae papyraceae, inaequilaterales, oblongae vel obovato-oblongae, 5 ~ 13.8 cm longae, 2 ~ 4 cm latae, apice cuspidatae, cuspidibus triangulari-linearibus 1.2 ~ 2.2 cm longis integris, basi oblique lateque cuneatae, margine crenatae vel denticulatae, cystolithis densis conspicuis bacilliformibus 0.1 ~ 0.2 mm longis supra notatae, triplinerves nervis lateralibus latere angustiore 3 eo latiore 4; petioli nulli vel 1 ~ 2 mm longi; stipulae membranaceae, luteolo-viridulae, lineares, 8 ~ 14

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mm longae, 1.2~1.8 mm latae, apice attenuatae, 1 (—2)-nerves. Cymae staminatae axillares, tri-chotomae, ca. 20-florae, glabrae; pedunculi ro-busti, ca. 1.2 mm longi; 0.8 mm crassi; bracteae deltoideae, ca. 0.5 mm longae, 0.8 mm latae; bra-teolae naviculari-oblongae, ca. 1 mm longae. Flores staminati perjuvenales. Inflorescentiae pistillatae ig-notae.

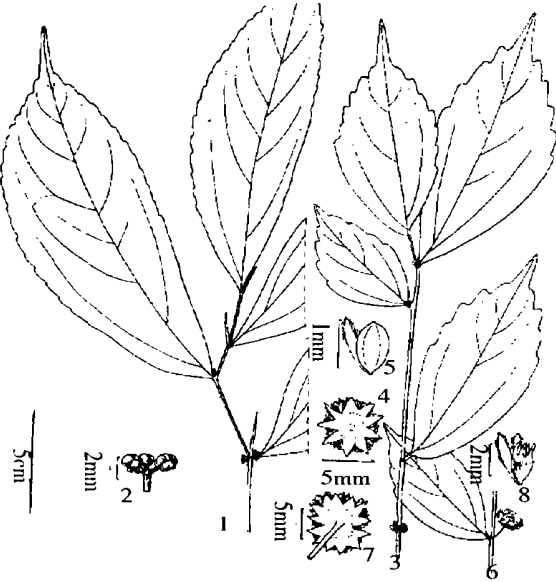


图 1 1~2. 三歧楼梯草 3~8. 大围山楼梯草
1. 雄株上部; 2. 雄聚伞花序; 3. 雌花枝; 4. 雌花序(下面观); 5. 小苞片和瘦果; 6. 叶和雄花序; 7. 雄花序(下面观); 8. 小苞片和雄花蕾

Fig. 1 1~2. *Elatostema trichotomum*
3~8. *Elatostema cyrtandrifolium* var. *daweishanicum*
1. Upper part of a staminate plant; 2. Staminate cyme (from holotype); 3. Pistillate flowering branch; 4. Pistillate inflorescence (seen from lower surface); 5. Bracteole and achene (from holotype); 6. Leaf and staminate inflorescence; 7. Staminate inflorescence (seen from lower surface); 8. Bracteoles and staminate flower bud (from paratype)

China. Yunnan (云南): Hekou (河口), Yaoshan District (瑶山区), Yingpan Mt. (营盘山), alt. 1 840 m, on tree trunk, 1999-09-18, Y. M. Shui *et al.* (税玉民等) 11167 (holotype, KUN).

本种的叶具半离基三出脉, 雄花序聚伞状, 三歧分枝, 而可能与硬毛楼梯草 (*Elatostema hirtellum* (W. T. Wang) W. T. Wang) 有亲缘关系, 但为多年生草本, 茎和叶均无毛, 托叶较大, 条形, 长 8~14 mm, 雄花序梗无毛而不同。硬毛楼梯草为小灌木, 其枝条被短硬毛, 叶下面被短糙伏毛, 托叶较

小, 呈钻形, 长 1.5~2 mm, 雄花序梗被短毛。

疏伞楼梯草组 (sect. *Pellionoides*) 的雄花序为二至三回分枝的聚伞花序, 不具花序托, 是楼梯草属的原始群, 特产我国西南及华南诸省区, 原知有 10 种^[2], 本种的发现使此数目增至 11 种。

勐仑楼梯草

Elatostema menglunense W. T. Wang et G. D. Tao in Bull. Bot. Res. Harbin 16 (1): 1, cum fig. 1996

E. cuspidatum auct. non Wight; X. W. Li in C. Y. Wu *et al.* Fl. Yunnan. 7: 300. 1997, p. p. quoad syn. *E. menglunense* W. T. Wang et G. D. Tao.

云南: 勐仑, 翠屏峰, 1995-06-01, 陶国达 80888 (holotype, PE !; isotypes, HITBC !)

地理分布: 勐仑特有种。

本种在亲缘关系上与骤尖楼梯草 (*E. cuspidatum* Wight) 稍接近, 与后者的区别为: 茎下部被贴伏反曲短柔毛, 上部疏被开展柔毛; 叶片上面被糙伏毛, 下面脉上有柔毛, 托叶较小, 多呈披针形, 长 4~8 mm, 宽 1.6~2.2 mm, 边缘有短毛; 雄花序托较小, 不明显, 长约 6 mm, 宽 4 mm, 苞片具长 5.5~6 mm 的角状长突起。在骤尖楼梯草, 茎无毛; 叶片无毛或只在上部疏被糙伏毛; 托叶较大, 通常条形, 长 5~10 (—20) mm, 宽 2~3 mm, 无毛; 雄花序托较大, 明显, 盘状, 长 6~11 mm, 宽 5~7 mm; 苞片具长 0.6~2 mm 的瘤状突起。^[1] 在楼梯草属, 雄花序托从无到有, 从小到大 (变大呈盘状时, 与菊科的花序托相似), 表现出一明显的演化趋势。因此, 花序托这个特征可以指示本属各种植物的演化水平, 同时也是在分类上划分属下各级分类群的重要依据。^[1, 2] 按照这个特征可以了解本种比较原始, 而骤尖楼梯草比较进化。本种于 1996 年在本刊发表一年之后, 李锡文教授^[3] 不予承认, 将其归并于骤尖楼梯草。但是上面列出的二种的区别特征说明这二种有明显区别, 不应归并, 根据上述, 现在本文中 will 将勐仑楼梯草予以恢复。

大围山楼梯草 (变种) 图 1: 3~8

Elatostema cyrtandrifolium (Zoll. & Mor.) Miq. var. *daweishanicum* W. T. Wang, var. nov. (sect. *Elatostema* ser. *Cuspidata* W. T. Wang) Fig. 1: 3~8

A var. *cyrtandrifolio* differt folii nervis lateralibus paucioribus utrinsecus 2 raro 3, stipulis anguste ovatis vel ovatis, receptaculis inflorescentiarum pistillarum minoribus suborbicularibus ca. 2 mm di-

ametro, bracteis apice haud corniculatis.

China. Yunnan (云南): Hekou (河口), Dawei Mt. (大围山), alt. 1 300 m, in forests, fl. white, 1999-10-07, Y. M. Shui *et al.* (税玉民等) 11834 (♂ holotype, KUN), 11850 (♂, KUN).

本变种与模式变种 (var. *cyrtandrifolium* 锐齿楼梯草) 的区别为: 叶的侧脉每侧 2 条, 稀为 3 条; 托叶呈狭卵形或卵形; 雌花序较小, 花序托较小, 花序托近圆形, 直径约 2 mm; 苞片顶端无角状突起。在模式变种, 叶的侧脉每侧 3~4 条; 托叶狭披针形或钻形; 雌花序较大, 花序托宽椭圆形, 长 5~9 mm; 苞片顶端通常有角状突起。^[2]

玉民楼梯草 图 2: 6~8

Elatostema shuii W. T. Wang, sp. nov. (sect. *Elatostema* ser. *Cuspidata* W. T. Wang) Fig. 2: 6~8

Affinis *E. platyphylo* Wedd. et *E. eduli* C. B. Robinson, quae foliorum auriculis majoribus usque ad 10~15 mm longis, inflorescentiarum pistillatarum pedunculis conspicuis 4~6 mm longis, receptaculis majoribus 6~12 mm longis recedunt.

Herba perennis, dioica. Caulis ca. 45 cm altus, basi lignosus, simplex, inferne puberulus, supeme glaber, cystolithis densis bacilliformibus 0.1~0.16 mm longis. Folia alternata, glabra, raro ad foliorum auriculorum margines ciliata; laminae chartaceae, inaequilaterales, elliptico-oblongae vel oblongae, 6~15.5 cm longae, 2.2~4.5 cm latae, apice cuspidatae, cuspidibus lanceolato-linearibus usque ad 2.5 cm longis basi 4 mm latis margine denticulatis, basi latere angustiore obtusae, eo latiore auriculatae, auriculis ca. 2 mm longis, cystolithis densis conspicuis bacilliformibus 0.15~0.4 mm longis utrinque notatae, trinerves, nervis lateralibus latere angustiore 3 eo latiore 4; petioli 1~2 mm longi vel nulli. Inflorescentiae staminatae ignotae. Inflorescentiae pistillatae 1~3 axillares, brevissime pedunculatae; pedunculi ca. 0.5 mm longi; receptacula late oblonga, ca. 3.5 mm longa, 2 mm lata, glabra, 2-lobata, cystolithis densis conspicuis bacilliformibus 0.1~0.2 mm longis; bracteae ca. 6, membranaceae, late triangulares, ca. 1 mm longae; bracteolae numerosae, densissimae, spathulato-oblancoolatae vel lineares, 1~1.2 mm longae, apice pilosae. Flos pistillatus subses-

ilis; tepal obscura; ovarium anguste obovoideum, ca. 0.4 mm longum; stigma penicillatum, ca. 0.35 mm longum.

China. Yunnan (云南): Hekou (河口), Xiaonanxi (小南溪), Huayudong (花鱼洞), alt. 200 m, at edge of secondary forest, 2000-03-28, Y. M. Shui *et al.* 12261 (holotype, KUN).

Haec species nova in honorem collectoris, Dr. Y. M. Shui, nominata.

本种与宽叶楼梯草 (*Elatostema platyphyllum* Wedd.) 和南海楼梯草 (*E. edule* C. B. Robinson) 有亲缘关系, 但叶基部的耳状下垂部分较小, 长约 2 mm, 雌花序较小, 花序托长约 3.5 mm, 花序梗很短, 长仅 0.5 mm 而不同。在宽叶楼梯草和南海楼梯草, 叶基部的耳状下垂部分较大, 长达 10~15 mm, 雌花序较大, 花序托长 6~12 mm, 花序梗较长, 长 4~6 mm。^[1, 2]

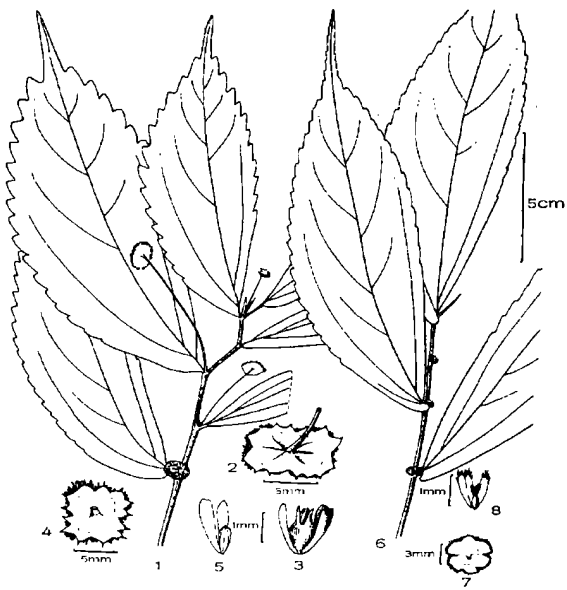


图 2 1~5. 尖山楼梯草 6~8. 玉民楼梯草;
1. 雌雄同株植株的上部; 2. 雄花序 (下面观); 3. 小苞片和雄花雷; 4. 雌花序 (下面观); 5. 小苞片和瘦果; 6. 雌株上部; 7. 雌花序 (下面观); 8. 小苞片和雌花

Fig. 2 1~5. *Elatostema jianshanicum*
6~8. *Elatostema shuii*;

1. Upper part of a monoecious plant; 2. Staminate inflorescence (seen from lower surface); 3. Bracteoles and staminate flower bud; 4. Pistillate inflorescence (seen from lower surface); 5. Bracteoles and achene (from holotype); 6. Upper part of a pistillate plant; 7. Pistillate inflorescence (seen from lower surface); 8. Bracteoles and pistillate flower (from holotype)

尖山楼梯草 图 2: 1~5

Elatostema jianshanicum W. T. Wang. sp. nov. Fig. 2: 1~5 (sect. *Elatostema* ser. *Petelotiana* W. T. Wang) Fortasse affinis *E. crispulo* W. T. Wang, quod caulibus adpresse crispuleque puberulis, foliis minoribus 4~8.4 cm longis apice obtusis margine crenatis, cystolithis majoribus 0.3~0.8 mm longis, pedunculis glabris inflorescentiis staminatis 6-bracteatis, receptaculis glabris, floribus staminatis pentameris; inflorescentiis pistillatis 4-bracteatis, receptaculis late linearibus facile distinguitur.

Herba perennis, dioica vel monoica. Caules 20~70 cm alti, basi 2.5~5 mm diametro, inferne sparse supeme dense patuleque hirtelli vel inferne glabri, supeme ramosi vel simplices, prope apicem leviter fractiflexi. Folia alternata, brevissime petiolata vel sessilia; laminae papyraceae, inaequilaterales, oblongo-ellipticae, longe ellipticae, anguste ovatae vel obovatae, 5~16 cm longae, 2~5.5 cm latae, apice cuspidato-acuminatae vel cuspidatae, cuspidibus lineri-triangularibus 0.6~2.4 cm longis integris, basi latere angustiore cuneatae eo latiore subauriculatae vel late cuneatae, margine dentatae, supra strigulosae, subtus adpresse pubescentibus et ad nervos basales et laterales pilis densis tectae, cystolithis densis supra conspicuis vel obscuris subtus invisibilibus bacilliformibus 0.15~0.3 mm longis, semitriplinerves, nervis lateralibus latere angustiore 2 eo latiore 3; petioli 1~3 mm longi vel nulli; stipulae membranaceae, albidae, lanceolatae vel anguste lanceolatae, 5~12 mm longae, 1~2.2 mm latae, 1(—2)-nerves, subtus ad nervos viridulos puberulae. Inflorescentiae staminatae singulariter axillares, longe pedunculatae; pedunculi 5.2~7.5 cm longi, patule puberuli; receptacula oblonga, 6~12 mm longa, 4~7 mm lata, medio 2-lobata, sparse puberula; bractea ca. 12, membranaceae, deltoideae, ca. 1.8 mm longae, 1.5~2 mm latae, apice calloso-incrassatae, subglabrae vel sparse ciliolatae; bracteolae albae, apice

medio brunneolae, naviculari-oblongae, ca. 2 mm longae, apice erosae, glabrae. Alabastra staminata obovoidea, ca. 1.2 mm longa, tetramera, apice 4-corniculata. Inflorescentiae pistillatae singulariter axillares, breviter vel longe pedunculatae; pedunculi graciles, 0.3~2.5 cm longi, densiuscule puberuli; receptacula late oblonga, 3~8 mm longa, 2~4.5 mm lata, glabra; bractae ca. 12, membranaceae, adpresse deltoideae, ca. 1 mm longae, 2 mm latae, apice cuspidatae, cuspidibus robustis viridibus ca. 0.6 mm longis puberulis, margine ciliolatae; bracteolae albidae, apice brunneo-lae, oblanceo-latolineares, ca. 2 mm longae, glabrae. Achenia anguste obovoidea, ca. 0.8 mm longa, longitudinaliter 7-costata.

China. Yunnan(云南): Hekou(河口), Yaoshan District(瑶山区), Jianshan(尖山), alt. 2050—2300 m, in forests, 1999—09—01, Y. M. Shui et al. (税玉民等) 10468 (♂, holotype, KUN), 10467, 10473, 10478, 10486 (♀, paratypes, KUN).

本种可能与弯毛楼梯草(*Elatostema crispulum* W. T. Wang)有亲缘关系,但茎被直的开展短硬毛,叶较大,长5~16 cm,顶端骤尖,边缘具牙齿,钟乳体较小,长0.15~0.3 mm,花序梗被开展短毛,雄花序有约12枚苞片,花序托有稀疏短柔毛,雄花四基数,雌花序也有约12枚苞片,花序托宽长圆形而显然不同。在弯毛楼梯草,茎被贴伏短曲毛,叶较小,长4~8.4 cm,顶端钝,边缘具浅钝齿,钟乳体较大,长0.3~0.8 mm,花序梗无毛,雄花序有6枚苞片,花序托无毛,雄花五基数,雌花序有4枚苞片,花序托呈宽条形。^[2]

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